OIB - P-3 Orion 04/08/18 - 04/09/18 Science Report

Aircraft: P-3 Orion - WFF (See full schedule)

Date: Sunday, April 8, 2018 - Monday, April 9, 2018

Mission: OIB

Mission Location: Greenland

Mission Summary:

OIB completed the high priority Chukchi West mission. This mission was designed to sample sea ice as far west as we can reach with the P-3, across the International Date Line and north of Russia's Wrangel Island. In addition to Level-1 Requirements SI1 and SI2, it addresses sea ice level projected requirement SIP2d by extending sea ice baseline observations to the Chukchi Sea north of the Bering Strait. The mission was modified to fly over a buoy cluster and the now completed ICEX survey area. We passed over the buoy cluster at 20:12:23Z, and the ICEX camp at 20:21Z, both were seen in visually in DMS and CAMBOT.

The weather was much cloudier than models had shown, so much of the flight was flown at a lower altitude than usual. Flying at lower altitude allowed us to get under the clouds and collect good data over most of the survey line. All instruments performed well during the flight. The ice in the Chukchi Sea area was also highly variable containing many leads, floes of varying sizes, interesting deformation features, and striking visual features from algae and sediment.

Data Volumes

ATM T6: 94 Gb ATM T7: 117 Gb CAMBOT: 51 Gb FLIR: 11 Gb KT19: 10 Mb DMS: 78.2 Gb

Snow radar: 1.08 Tb MCoRDS: No data collected

Accumulation radar: No data collected

Data on: 1954 Data off: 0100

Submitted by: Nathan T. Kurtz on 04/08/18

File:

P-3 Orion 04/08/18 - 04/09/18

Flight Number: 2018 OIB Arctic -Science #7 Payload Configuration: 2018 OIB Arctic

Nav Data Collected: No Total Flight Time: 8.3 hours

Submitted by: Janet Letchworth on 04/08/18

Flight Segments:

From:	PAFA	То:	PAFA
Start:	04/08/18 18:28 Z	Finish:	04/09/18 02:43 Z
Flight Time:	8.3 hours		
Log Number:	18P008	PI:	Nathan Kurtz
Funding Source:	Bruce Tagg - NASA - SMD - ESD Airborne Science Program		
Purpose of Flight:	Science		
Comments:	Today's flight covered the Chukchi West line - a high priority sea ice mission.		

Flight Hour Summary:

	18P008
Flight Hours Approved in SOFRS	201.2
Total Used	190.4
Total Remaining	10.8

18P008 Flig	18P008 Flight Reports						
Date	Flt #	Purpose of Flight	Duration	Running Total	Hours Remaining	Miles Flown	
03/13/18	2018 OIB Arctic - Airworthiness Test Flight	Other	0.8	0.8	200.4		
03/14/18	2018 OIB Arctic - Project Test Flight - Laser	Other	2.6	3.4	197.8		
03/15/18	2018 OIB Arctic - Project Test Flight - Radar	Other	5.7	9.1	192.1		
03/18/18	2018 OIB Arctic - delta ATF	Other	0.8	9.9	191.3		
03/20/18	2018 OIB Arctic - Transit to Thule	Transit	7.9	17.8	183.4		
03/22/18	2018 OIB Arctic - Science #1	Science	7.8	25.6	175.6		
04/03/18	2018 OIB Arctic - Science #2	Science	7.9	33.5	167.7		
04/04/18	2018 OIB Arctic - Science #3	Science	8.1	41.6	159.6		
04/05/18	2018 OIB Arctic - Science #4	Science	8	49.6	151.6		
04/06/18	2018 OIB Arctic - Science #5	Science	8.8	58.4	142.8		
04/07/18 - 04/08/18	2018 OIB Arctic - Science #6	Science	8.1	66.5	134.7		
04/08/18 - 04/09/18	2018 OIB Arctic - Science #7	Science	8.3	74.8	126.4		
04/14/18 - 04/15/18	2018 OIB Arctic - Science #8	Science	7.7	82.5	118.7		
04/16/18	2018 OIB Arctic - Science #9	Science	8.2	90.7	110.5		
04/18/18	2018 OIB Arctic - Science #10	Science	8	98.7	102.5		
04/19/18	2018 OIB Arctic - Science #11	Science	7.7	106.4	94.8		
04/20/18	2018 OIB Arctic - Transit to Kanger	Transit	4.2	110.6	90.6		
04/21/18	2018 OIB Arctic - Science #12	Science	8.1	118.7	82.5		
04/22/18	2018 OIB Arctic - Science #13	Science	6.5	125.2	76		
04/23/18	2018 OIB Arctic - Science #14	Science	8.2	133.4	67.8		
04/25/18	2018 OIB Arctic - Science #15	Science	7.7	141.1	60.1		
04/26/18	2018 OIB Arctic - Science #16	Science	8.8	149.9	51.3		
04/27/18	2018 OIB Arctic - Science #17	Science	8	157.9	43.3		

04/29/18	2018 OIB Arctic - Science #18	Science	8.3	166.2	35
04/30/18	2018 OIB Arctic - Science #19	Science	9.3	175.5	25.7
05/01/18	2018 OIB Arctic - Science #20	Science	7.4	182.9	18.3
05/03/18	2018 OIB Arctic - Return Transit Leg #1	Transit	6.4	189.3	11.9
05/03/18	2018 OIB Arctic - Return Transit Leg #2	Transit	0.6	189.9	11.3
05/03/18	2018 OIB Arctic - Return Transit Leg #3	Transit	0.5	190.4	10.8

Flight Reports began being entered into this system as of 2012 flights. If there were flights flown under an earlier log number the flight reports are not available online.

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Page Editor: Brad Bulger

NASA Official: Bruce A. Tagg

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